

CLAIMS:

1. An instrument for positioning a cup component of an orthopaedic joint prosthesis, which comprises a shaft, and a flange towards the end of the shaft on which the cup component can be fixed, which extends from the shaft transversely, and which can be retracted from an in-use position in which the flange can be received in a groove in the internal surface of the cup component, when positioned over the said end of the instrument, to a retracted position in which the flange is withdrawn towards the axis of the shaft from the in-use position, allowing the cup component to be released from the instrument, in which the flange comprises at least two radially spaced apart flange portions, at least one of the flange portions being retractable as specified above and biased towards the in-use position by means of a spring element which is made of a material which is different from that of the flange portion.

2. An instrument as claimed in claim 1, in which the instrument includes a support which extends transversely, generally parallel to the flange, and in which the movement of the retractable flange portion between the retracted and in-use positions is in a direction which is parallel to the support.

3. An instrument for positioning a cup component of an orthopaedic joint prosthesis, which comprises a shaft, and a flange towards the end of the shaft on which the cup component can be fixed, which extends from the shaft transversely, and which can be retracted from an in-use position in which the flange can be received in a groove in the internal surface of the cup component, when positioned over the said end of the instrument, and a retracted position in which the flange is withdrawn towards the axis of the shaft from the in-use position, allowing the cup component to be released from the instrument,

in which the instrument includes a transverse support which extends generally parallel to the flange, and in which the flange comprises at least two radially spaced apart flange portions, at least one of the flange portions being retractable as specified above while being supported by the support, the movement of the retractable flange portion between the retracted and in-use positions being in a direction which is parallel to the support, the retractable flange portion being biased towards the in-use position.

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4. An instrument as claimed in claim 3, in which the retractable flange portion is biased towards the in-use position by means of a spring element which is made of a material which is different from that of the flange portion.

5. An instrument as claimed in claim 3, in which the support presents a pair of opposite support surfaces and the retractable flange portion slides between them.

6. An instrument as claimed in claim 3, in which the support presents a support surface which the side of the retractable flange portion facing towards the end of the instrument can slide against.

7. An instrument as claimed in claim 1 or claim 4, in which the spring element is formed from a non-metallic material.

8. An instrument as claimed in claim 1 or claim 4, in which the spring element is positioned between the flange portion and the axis of the shaft, and is compressed elastically by the flange portion when the flange portion is moved from its in-use position towards its retracted position.

9. An instrument as claimed in claim 8, in which the spring element comprises an O-ring which is positioned between the retractable flange portion and the shaft.

10. An instrument for positioning a cup component of an orthopaedic joint prosthesis, which comprises (a) a shaft, (b) a flange towards the end of the shaft on which the cup component can be fixed, which extends from the shaft transversely, and which can be retracted from an in-use position in which the flange can be received in a groove in the internal surface of the cup component, when positioned over the said end of the instrument, and a retracted position in which the flange is withdrawn towards the axis of the shaft from the position in which it can be received in a groove in the cup component, allowing the cup component to be released from the instrument, and (c) a pressuring plate which is fixed relative to the shaft with the flange between the plate and the said end of the shaft, for engaging the open mouth of the cup component to apply force to it.

11. An instrument as claimed in claim 10, in which the flange comprises at least two radially spaced apart flange portions
12. An instrument as claimed in claim 10, in which the edge of the plate is chamfered so that its transverse dimension is greatest at about the surface which contacts the cup component.
13. An instrument as claimed in claim 10, in which the transverse dimension of the pressurising plate is greater than that of flange when the flange is in its in-use position.
14. An instrument as claimed in any one of claims 1, 3 and 10, in which the retractable flange portion is formed from a non-deformable material.
15. An instrument as claimed in any one of claims 1, 3 and 10, in which the retractable flange portion is formed from a metal.
16. An instrument as claimed in any one of claims 1, 3 and 10, which includes a plate which is fixed relative to the shaft with the flange between the plate and the said end of the shaft, for engaging the open mouth of the cup component to apply force to it, in which the edge of the plate is chamfered so that its transverse dimension is greatest at about the surface which contacts the cup component.
17. An instrument as claimed in any one of claims 1, 3 and 10, in which the face of the flange which faces towards the said end of the shaft is chamfered at its edge.
18. An instrument as claimed in any one of claims 1, 3 and 10, which comprises at least three radially spaced apart flange portions.
19. An instrument as claimed in any one of claims 1, 3 and 10, which includes a soft cap which is positioned between the flange and the said end of the shaft, and which at least partially surrounds the end of the shaft.

20. An assembly which comprises an instrument as claimed in any one of claims 1, 3 and 10, and a cup component of a joint prosthesis.